

arranged side by side in a parallel array, each of said laser emission portions including an active layer for emitting light;

b) a multimode interference region including a first wave-guiding layer, wherein one end of the first wave-guiding layer is spaced by an equal length or distance in an optical direction from the active layers of the plurality of laser emission portions so as to provide an equal passage of time of light thereto from the active layers; and

an output waveguide region including a second wave-guiding layer, the second wave-guiding layer being optically coupled to an opposite end of the first wave-guiding layer of the interference region.

12. (Twice amended) A semiconductor laser element according to claim 10, wherein the first wave-guiding layer and the plurality of third wave-guiding layers are comprised of low optical absorption material.

23. (Twice amended) A semiconductor laser element according to claim 28, wherein each of the plurality of second wave-guiding layers of the input waveguide region has a predetermined refractive index.

28. (Amended) A semiconductor laser element, comprising:

a semiconductor laser region including a plurality of laser oscillation portions each having the same construction relative to one another, arranged side by side, and having a common modulation electrode for operating in a single mode, each of said laser oscillation portions having an active layer which performs laser operations at a same wavelength;

a multimode interference region including a first wave-guiding layer coupled to said laser oscillation portions via an input waveguide region including a plurality of parallel equal length waveguides having respective second wave-guiding layers;

an output waveguide region including a third wave-guiding layer coupled to said second wave-guiding layers;

wherein the active layer of the plurality of laser oscillation portions, the first wave-guiding layer of said multimode interference region, the second layers of the input waveguide region, and the third layer of the output waveguide region are formed on a common substrate.